

**AGENDA TITLE:** Public Hearing to Consider Adopting Resolution Adopting the City's 2005 Urban

Water Management Plan Update

**MEETING DATE:** March 15,2006

**Public Works Director** PREPARED BY:

**RECOMMENDED ACTION:** That the City Council conduct a public hearing to consider adopting a

resolution adopting the City's 2005 Urban Water Management Plan update.

**BACKGROUND INFORMATION:** During the 1983/84 Regular Session, the California Legislature enacted

Assembly Bill 797, and as subsequently amended, created Water Code Section 10610, et seq., known as the Urban Water Management Planning Act. This Act requires the City of Lodi to review and update

the Urban Water Management Plan (UWMP) every five years. The current update was performed with the assistance of RMC Water and Environment, and is the fourth update of Lodi's Urban Water Management Plan. The adoption process requires a public hearing and adoption by Council.

Since publication of the Draft UWMP, the State Department of Water Resources (DWR) has provided minor preliminary comments, The comments, along with the proposed responses, are reflected in Exhibit A and will be incorporated into the UWMP submitted to the DWR.

The Plan outlines Lodi's historical and projected population and water use, water rates, water metering program status, and Woodbridge Irrigation District surface water as a source of supply. There are substantial changes from the 2000 UWMP. Much more attention is given to the groundwater supply and to conservation measures, including metering.

At the February 7, 2006, Shirtsleeve Session, the consultant, RMC Water and Environment, gave a presentation outlining the contents and findings of the Plan. Copies of the Plan were made available to the public on February 3, 2006. The public hearing was set at the February 15, 2006, Council meeting.

Note that the Plan addresses supply and demand; it does not specify how the Citys WID water will be utilized. i.e., groundwater recharge or treatment plant. This will be addressed separately at the April 5, 2006. Council meetina.

By maintaining an updated Urban Water Management Plan in accordance with FISCAL IMPACT:

State requirements, the City of Lodi will remain eligible for Proposition 50 grant funding. The City is currently applying *for a* \$75,000 Proposition 50 grant to supplement funding for a Recycled Water Master Plan (RWMP). The City is

also applying for a Proposition 50 grant to offset 50% of the estimated \$1.4 million dollar costs associated with a portion of the PCE/TCE remediation.

**FUNDING AVAILABLE:** None required.

> Richard C. Prima, Jr. PublicWorks Director

Prepared by Charlie Swirniey. Senior Civil Engineer RCP/CES/pmf cc: Stephen Schwabauer, City Anorney

Frank Beeier. Assistant Water/Wastewater Superintendent

Wally Sandelin, City Engineer

APPROVED: Blair King City Manager

3/8/2006 J \Water\CUWMP\_PH doc



# **DRAFT** Response to Comments

City of Lodi - 2005 Urban Water Management Plan

Subject: Response to DWR Comments on Draft UWMP

Prepared For: Charlie Swimley

Prepared by: Andy Smith

Reviewed by: Glenn Hermanson

**Date:** March 2, 2006

**Reference:** 0140-01.02

Commenter	Comment	Page/Section Number	Response
Kim Rosmaier (DWR)	If WID expects no change in deliverable volume for the hydrologic scenarios, state this in Section 3.5	Section 3.5 pg 3-9	A footnote has been added to Table 3-7: "b. Reliability of WID supply is indicated in the City's contract with WID in Appendix D." A paragraph following Table 3-7 has also been added: "Wholesale supply reliability is presented in Chapter 6. Although changes in deliverable volumes of water for future hydrologic scenarios have not been formally predicted at this time, Chapter 6 presents the most restrictive possible cases for the future."
Kim Rosmaier (DWR)	Table 4-3, addition errors	Section 4.1.2 pgs 4-4 and 4- 5	After speaking with Kim, it turns out that she hadn't noticed a footnote (footnote b) that states that totals for each year are rounded to the nearest hundred. Rounding in this way is acceptable, and there are no addition errors.
Kim Rosmaier (DWR)	DWR requires the mention of catastrophic interruption of supply due to an earthquake. If Lodi in a low-probability area, suggest you mention this in the plan in Section 10.6.	Section 10.6 pg 10-6	Agree. The following sentence was added: "Lodi is considered to be in a low-probability area for earthquakes."
Kim Rosmaier (DWR)	DWR requires a reduction measuring method. I assume the production meters would be monitored more frequently. Suggest you include a statement indicating this.	Section 10.8.2 pg 10-8	Agree. The following sentence was added: "In the event of a water shortage, the City will monitor its production meters more frequently."

П	D	Λ		г
	к	м	_	

Kim Rosmaier (DWR)	DWR requires at least the discussion of financial incentives as an action to promote recycled water. Suggest you include a statement in Section 8.9 that states "financial incentives may be one action considered". That will qualify for addressing the provision.	Section 8.9 pg 8-5	Agree. The following sentence was added: "Financial incentives for recycled water use may be one action considered."
Kim Rosmaier (DWR)	Implementation paragraph states "The city performs water audits upon request". This DMM refers to a system-wide water audit to determine unaccounted-for water volume. If the water audits noted above are for individual homes or businesses, this statement is incorrect. Water audits for homes are included in DMM 1 and water audits for businesses are included in DMM 9.	Section 5.1.3 pg 5-8	The sentence in question has been removed to avoid confusion. The first sentence of section 5.1.3 now reads "The City has implemented a capital improvement program to replace water lines, with an ultimate goal of replacing 1 percent of the system annually."
Kim Rosmaier (DWR)	Be sure to send a copy [of the Final UWMP] to the State Library and note same in this section.	Section 1.7 pg 1-3	Agree. A bullet item for the CA State Library was added to this section.
Kim Rosmaier (DWR)	Table 2-2 addresses the demographics provision but perhaps also include a brief paragraph. The City's webpage has a good intro to its City on the Community Profile page.	Section 2.3 pg 2-2	Agree. The following was added: "Lodi is built on a strong and broad based agricultural industry with national and industrial markets for its commodities and products. Wines, processed foods, nuts, fruit and milk are major commodities of the Lodi area and provide the basic material for food processing and packaging. These commodities support the operations of General Mills, and Pacific Coast Producers, two companies in the business of processing local agricultural commodities.  In addition, Lodi has a wide range of small, financially sound businesses. These companies range in size from 10 to 150 employees and produce a wide variety of products, services and commodities.  Recently, there has been an increase in industrial and residential development within the City. This new development, combined with the growing strength of the wine/grape industry, is a positive economic indicator for Lodi. Recently, several industries moved to Lodi. These industries collectively have created approximately 850 new jobs."
Kim Rosmaier (DWR)	Typo, third paragraph, second line third word: <i>buy</i> should be <i>but</i> and third line fourth word: <i>form</i> should be <i>from</i>	Section 3.1.1 pg 3-1	Agree. Edits have been made.

#### RESOLUTION NO. 2006-42

#### A RESOLUTION OF THE LODI CITY COUNCIL ADOPTING THE CITY'S 2005 URBAN WATER MANAGEMENT PLAN UPDATE

WHEREAS, several years ago the California Legislature enacted Assembly Bill 797, and as subsequently amended, created Water Code Section 10610, et seq., known as the Urban Water Management Planning Act; and

WHEREAS, this Act requires the City of Lodi to review and update the Urban Water Management Plan every five years. The current update was performed with the assistance of RMC Water and Environment, and is the fourth update of Lodi's Urban Water Management Plan. The adoption process requires a public hearing and adoption by Council; and

WHEREAS, since publication of the Draft Urban Water Management Plan, the State Department of Water Resources has provided minor preliminary comments. The comments, along with the proposed responses, are reflected in Exhibit A and will be incorporated into the Urban Water Management Plan submitted to the Department of Water Resources; and

WHEREAS, the Plan outlines Lodi's historical and projected population and water use, water rates, water metering program status, and Woodbridge Irrigation District surface water as a source of supply. There are substantial changes from the 2000 Urban Water Management Plan, as much more attention is given to the groundwater supply and to conservation measures, including metering; and

WHEREAS, the Plan addresses supply and demand and does not specify how the City's WID water will be utilized, i.e., groundwater recharge or treatment plant, as this will be addressed separately; and

WHEREAS, by maintaining an updated Urban Water Management Plan in accordance with State requirements, the City of Lodi will remain eligible for Proposition 50 grant funding. The City is currently applying for a \$75,000 Proposition 50 grant to supplement funding for a Recycled Water Master Plan (RWMP). The City is also applying for a Proposition 50 grant to offset 50% of the estimated \$1.4 million dollar costs associated with a portion of the PCE remediation.

NOW, THEREFORE, BE IT RESOLVED that the Lodi City Council does hereby adopt the City of Lodi's 2005 Urban Water Management Plan Update on file in the Public Works Department.

Dated: March 15,2006

I hereby certify that Resolution No. 2006-42 was passed and adopted by the Lodi City Council in a regular meeting held March 15, 2006, by the following vote:

AYES: COUNCIL MEMBERS - Beckman, Hansen, Johnson, and Mounce

NOES: **COUNCIL MEMBERS - None** 

ABSENT: COUNCIL MEMBERS - Mayor Hitchcock

ABSTAIN: COUNCIL MEMBERS - None

> SUSAN J. BLACKSTON City Clerk

Suse & Blight



# **DRAFT Response to Comments**

City of Lodi - 2005 Urban Water Management Plan

Subject: Response to DWR Comments on Drafl UWMP

Prepared For: Charlie Swimley

Prepared by: Andy Smith

Reviewed by: Glenn Hermanson

Date: March 2,2006

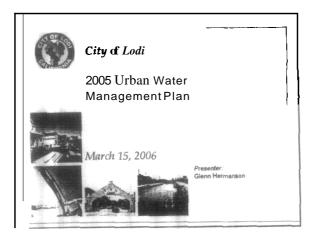
Reference: 0140-01.02

Commenter	Comment	Page/Section Number	Response
Kim Rosmaier (DWR)	If WID expects no change in deliverable volume for the hydrologic scenarios, state this in Section 3.5	Section 3.5 pg 3-9	A footnote has been added to Table 3-7: "b. Reliability of WID supply is indicated in the City's contract with WID in Appendix D." A paragraph following Table 3-7 has also been added: "Wholesale supply reliability is presented in Chapter 6. Although changes in deliverable volumes of water for future hydrologic scenarios have not been formally predicted at this time, Chapter 6 presents the most restrictive possible cases for the future."
Kim Rosmaier (DWR)	Table 4-3, addition errors	Section 4.1.2 pgs 4-4 and 4- 5	After speaking with Kim, it turns out that she hadn't noticed a footnote (footnote b) that states that totals for each year are rounded to the nearest hundred. Rounding in this way is acceptable, and there are no addition errors.
Kim Rosmaier (DWR)	DWR requires the mention of catastrophic interruption of supply due to an earthquake. If Lodi in a low-pmbabilityarea. suggest you mention this in the plan in Section 10.6.	Section-10.6 pg 10-6	Agree. The following sentence was added: "Lodi is considered to be in a low-probability area for earthquakes."
Kim Rosmaier (DWR)	DWR requires a reduction measuring method. I assume the production meters would be monitored more frequently. Suggest you include a statement indicating this.	Section 10.8.2 pg 10-8	Agree. The following sentence was added: "In the event of a water shortage, the City will monitor its production meters more frequently."

### sponse to DWR Comments on Draft UWMP

70PO1100 to B	WK Comments on Dian Owner		DRAF
íim ≀osmaier DWR)	DWR requires at least the discussion of financial incentives as an action to promote recycled water. Suggest you include a statement in Section 8.9 that states "financial incentives may be one action considered". That will qualify for addressing the provision.	Section 8 9 pg 8-5	Agree. The following sentence was added: "Financial incentives for recycled water use may be one action considered."
(im tosmaier DWR)	Implementationparagraph states "The city performs water audits upon request". This DMM refers to a system-wide water audit to determine unaccounted-for water volume. If the water audits noted above are for individual homes or businesses, this statement is incorrect. Water audits for homes are included in <b>DMM</b> 1 and water audits for businesses are included in <b>DMM</b> 9.	Section 5.1.3 pg 5-8	The sentence in question has been removed to avoid confusion. The first sentence of section <b>5.1.3</b> now reads "The City has implemented a capital improvement program to replace water lines, with an ultimate goal of replacing 1 percent of the system annually."
Gm tosmaier DWR)	Be sure to send acopy [of the Final UWMP] to the State Library and note same in this section.	Section 1.7 pg 1-3	Agree. A bullet item for the CA State Library was added to this section.
(im tosmaier DWR)	Table 2-2 addresses the demographics provision but perhaps also include a brief paragraph. The City's webpage has a good intro to its City on the Community Profile page.	Section 2.3 pg 2-2	Agree. The following was added:  'Lodi is built on a strong and broad based agriculturalindustry with national and industrial markets for its commodities and products. Wines. processed foods. nuts, fruit and milk are major commodities of the Lodi area and provide the basic material for food processing and packaging. These commodities support the operations of General Mills, and Pacific Coast Producers two companies in the business of processing local agricultural commodities.  In addition, Lodi has a wide range a small. financially sound businesses. These companies range in size from 10 to 150 employees and produce a wide variety of products. services and commodities.  Recently. there has been an increase in industrial and residential development within the City. This new development, wmbined with the growing strength of the winelgrape industry, is a positive economic indicator for Lodi. Recently. several industries moved to Lodi. These industries collectively have created
ANNA .	The state of the s	F	approximately850 new jobs."
(im Rosmaier DWR)		, <b>Section 3.1.1</b> pg3-1	Agree. Edits have been made.

filed 3-15-06 Item I-2



#### **Background**

- Urban Water Management Plans (UWMP) are required by the Urban Water Management Planning Act (AB 797). Originally passed in 1983 and since then amended 18 times.
- As an urban water supplier providing more than 3,000 acre-feet per year (AFY), Lodi must prepare and submit an UWMP to the Dept. of Water Resources (DWR) every five years.
- UWMPs are meant to assist and encourage integrated regional water planning, and are a prerequisite for State water grant funding.

#### **Background**

- The UWMP may be used as a foundation for Water Supply Assessments (SB 610) and Written Verifications of Water Supply (SB 221), which are required for new development.
- DWR is responsible for deeming UWMPs
   "complete," and has distributed a guidebook to assist water suppliers that are preparing them.

#### Primay Goals of Lodi's 2005 UWMP

- Create a functional document for Lodi's longterm water planning
- Adequately address all DWR requirements

#### Table of Contents

#### Chapter 1: Introduction

Chapter 2: Supplier Service Area

Chapter 3: Water Supply

Chapter 4: Water Demand

Chapter 5: Demand Management Measures

Chapter 6: Water Supply Reliability

Chapter 7: Water Quality Impacts on Reliability

Chapter 8: Wastewater and Recycled Water

Chapter 9: Supply and Demand Comparison
Chapter 10: Water Shortage Contingency Plan

Chapter 11: Adoption & Implementation of the UWMP

Appendices

#### Chapter 1: Introduction

#### Coordinatiin with Other Agencies

- Coordination with appropriate agencies is required by DWR and prudent for regional planning
  - Northeastern San Joaquin County Groundwater Banking Authority
  - > San Joaquin County
  - > California Department of Health Services

#### Chapterl: Introduction

#### **Public Participation**

- Public participation is required by DWR and encouraged by Lodi
  - > Public hearing (scheduled for February 15, 2006)
  - > Two week public review period starting the day of the public hearing

## Table of Contents

Chapter 1: Introduction

Chapter 2: Supplier Service Area

Chapter 3: Water Supply

Chapter 4: Water Demand

Chapter 5: Demand Management Measures

Chapter 6: Water Supply Reliability

Chapter 7: Water Quality Impacts on Reliability

Chapter 8: Wastewater and Recycled Water

Chapter 9: Supply and Demand Comparison

Chapter 10: Water Shortage Contingency Plan

Chapter 11: Adoption & Implementation of the UWMP

Appendice

Chapter 2: Supplier Service Area

#### Description Of Service Area

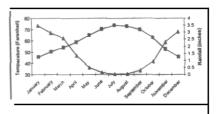
- Current population is approximately 62,500
- Service area covers about twelve square miles
- White Slough Water Pollution Control Facility (WSWPCF) located 6 miles to the southwest



#### Chapter 2: Supplier Service Area

#### Climate

 High temperatures and dry weather mean that Lodi's peak demands occur during the summer

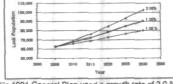


#### Chapter 2: Supplier Service Area

#### Population

A population growth rate of 1.5% was assumed for the UWMP (rates

of 1.0% and 2.0% are shown for comparison)



 Lodi's 1991 General Plan used a growth rate of 2.0 %, resulting in a projection for 2007 that was significantly higher than what will likely be achieved.

#### Table of Contents

Chapter 1: Introduction

Chapter 2: Supplier Service Area

Chapter 3: Water Supply

Chapter 4: Water Demand

Chapter 5: Demand Management Measures

Chapter 6: Water Supply Reliability

Chapter 7: Water Quality Impacts on Reliability

Chapter 8: Wastewater and Recycled Water

Chapter 9: Supply and Demand Comparison Chapter 10: Water Shortage Contingency Plan

Chapter 11: Adoption & Implementation of the UWMP

Appendices

#### Chapter 3: Water Supply

#### **Current Water Supply - Groundwater**

 Groundwater is currently the sole supply source used in Lodi In 2005, Lodi used approximately 17 300 acre-feet (AF) of groundwater



1 AF per year (AFY) is roughly the amount of water used by a household of 3 5 people

■ Groundwater levels In Lodiare decreasing at a rate of about 5 inches per year

#### Chapter 3: Water Supply

#### Current Water Supply - Surface Water

- Lodirecently signed a contract with Woodbridge Irrigation District (WID) to purchase 6.000 AFY from the Mokelumne River for 40 years.
- This supply has yet to be utilized. Lodi is in the process of determining when, where, and what kind Of infrastructure will be required to utilize this new supply.

#### Chapter 3: Water Supply

#### Current Water Supply - Recycled Water

- The source of Lodi's recycled water is the treated effluent from WSWPCF
- Approximately 2,500 AFY is currently recycled near WSWPCF The remaining effluent is discharged to the Delta
- Substantial infrastructure will be required to utilize additional recycled water supply

#### **Chapter 3: Water Supply**

#### Future Water Supply -Groundwater

Based on recent investigations, Lodi's sustainable yield is 15,000 AFY.

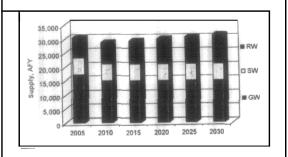
#### Future Water Supply - Surface Water

 6,000 A M will be available during the remainder of Lodi's 40-year cantract with WID.

#### Future Water Supply - Recycled Water

 Available recycled water will grow from 7.200 A M in 2005 to approximately 10.380 AFY in 2030.

#### Chapter 3: Water Supply



#### Chapter 3: Water Supply

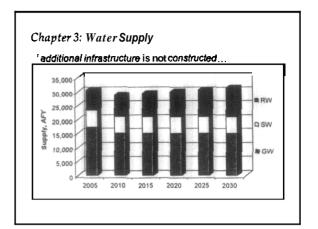
# Why is treated wastewater considered a recycled water supply?

- Wastewater is "real" water
- Lodi's WSWPCF provides filtration and advanced disinfection. Effluent of this quality meets all State and federal regulations for recycling.
- Lodi's RecycledWater Master Planwill clearly define the distribution and application of recycled water in the future.

#### Chapter 3: Water Supply

#### Differencesbetween UWMP Supplies and 'Reality'

- Although the supplies shown in the UWMP are 'real," Lodi lacks the infrastructure to distribute surface water and recycled water to its customers
- If the additional infrastructure is not constructed,
   Lodi's supply picture looks much different...



#### Table of Contents

Chapter 1: Introduction

Chapter 2: Supplier Service Area

Chapter 3: Water Supply

Chapter 4: Water Demand

Chapter 5: Demand Management Measures

Chapter 6: Water Supply Reliability

Chapter 7: Water Quality Impacts on Reliability

Chapter 8: Wastewater and Recycled Water

Chapter 9: Supply and Demand Comparison

Chapter 10: Water Shortage Contingency Plan
Chapter 11: Adoption & Implementation of the UWMP

Appendices

#### Chapter 4: Water Demand

#### **Current Water Demand**

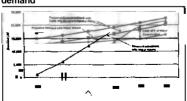
 Municipal demand for 2WS was 17.300 AF. The majority of this water sused for impation during the summer months.

A recycled water demand of 2.500 AFY is included in the UWMP This demand effectively reduces the amount of recycled water available to Lodi for municipal purposes, and is therefore considered a demand by DWR

#### Chapter 4: Water Demand

#### **Future Water Demand**

 Lodi will begin metering residential connections in the near future, and expects to realize a 15% reduction in demand



#### **Table of Contents**

Chapter 1: Introduction

Chapter 2: Supplier Service Area

Chapter 3: Water Supply

Chapter 4: Water Demand

Chapter 5: Demand Management Measures

Chapter 6: Water Supply Reliability

Chapter 7: Water Quality Impacts on Reliability

Chapter 8: Wastewater and Recycled Water

Chapter 9: Supply and Demand Comparison

Chapter 10: Water Shortage Contingency Plan
Chapter 11: Adoption & Implementation of the UWMP

Appendices

#### Chapter 5: Demand Management Measures

- DWR requires that 14 Demand Management Measures (DMMs) are addressed in the UWMP.
- For each DMM that Lodi currently implements, a description of Lodi's current practices is provided, including costs and estimated water savings.
- For each DMM that Lodi does not currently implement, a cost effectiveness summary has been orovided.

#### Chapter 5: Demand Management Measures

#### Summary of Lodi's DMMs:

	Water Survey Programs for Single & seedy and Multi-Family Environted Conference	No: B/C Ratio = 0.5
à .	Residential Plumbing Retrolls	Yes
3	System Welst Audits, Look Dotorform and Report	Yes
4	Staturing with Commodity Rates for all New Connections and Retrofit of Enading Connections	In Process
1	Large Landinapa Conservation Programs and Incombres	No: grC Rutte = 6.6
4	Jilgh Efficiency-Manhing Machine Rabate Programs	No. a/C Ratio = 8.1
¥	Public Information Programs	Yes
1	School Edutation Programs	Yes
9	Conservation, Programs for Communical, Industrial, and Inestrutional (CII) As counts	No: G/C Retio # 2.2
2,0	Mhalosale Agency Programs	Not applicable
11	Conservation, Prizing	In Process
12	Water Consequation Coordinator	Yes
13	Water Winds Probbitions	Yee
14	Residential Ultra-Low Flush Tolly: Replacement Program	Yes

\*B/C = Benefit-to-Cost Ratio

#### Table of Contents

Chapter 1: Introduction

Chapter 2: Supplier Service Area

Chapter 3: Water Supply

Chapter 4: Water Demand

Chapter 5: Demand Management Measures

Chapter 6: Water Supply Reliability

Chapter 7: Water Quality Impacts on Reliability

Chapter 8: Wastewater and Recycled Water

Chapter 9: Supply and Demand Comparison

Chapter 10: Water Shortage Contingency Plan

Chapter 11: Adoption & Implementation of the UWMP

Appendices

#### Chapter 6: Water Supply Reliability

- Off.odi's ground, surface, and recycled water supplies, only the 6,000 AFY of surface water is considered susceptible to climatic conditions.
- WID can legally reduce Lodi's deliveries by 50% during dry years, but no further
- Aithough groundwater levels are declining in general, fluctuations due to drought are typically insignificant.
- Recycledwater is derived primarily from indoor water usage, which does not vary significantly during dry weather

#### Table of Contents

Chapter 1: Introduction

Chapter 2: Supplier Service Area

Chapter 3: Water Supply

Chapter 4: Water Demand

Chapter 5: Demand Management Measures

Chapter 6: Water Supply Reliability

Chapter 7: Water Quality Impacts on Reliability

Chapter 8: Wastewater and Recycled Water

Chapter 9: Supply and Demand Comparison

Chapter 10: Water Shortage Contingency Plan
Chapter 11: Adoption & Implementation of the UWMP

Appendices

#### Chapter 7: Water Quality Impacts on Reliability

#### Groundwater

 Lodi's wells are equipped to provide emergency disinfection. Several locations provide filtration to remove DBCP.

#### Surface Water

 Water from the Mokelumne River is generally or very high quality

#### RecycledWater

 Recycled water from WSWPCF meets stringent State and federal regulations far municipal reuse.

#### Table of Contents

Chapter 1: Introduction

Chapter 2: Supplier Service Area

Chapter 3: Water Supply

Chapter 4: Water Demand

Chapter 5: Demand Management Measures

Chapter 6: Water Supply Reliability

Chapter 7: Water Quality Impacts on Reliability

Chapter 8: Wastewater and Recycled Water

Chapter 9: Supply and Demand Comparison

Chapter 10: Water Shortage Contingency Plan

Chapter 11: Adoption & Implementation of the UWMP

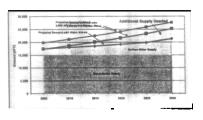
Appendices

#### Chapters: Wastewater & Recycled Water

- WSWPCF currently treats about 7,200 AFY of municipal and industrial wastewater. The treatment process includes filtration and disinfection, making the treated effluent suitable for industrial and municipal reuse.
- Approximately 2,500 AFY of water is currently recycled near WSWPCF. This demand is expected continue in the future.

#### Chapter & Wastewater & Recycled Water

 It is estimated that by 2025, water demand will exceed current ground and surface water supplies Lodi may need to rely on a portion of its recycled water supplies to meet the additional demands



#### Chapters: Wastewater & Recycled Water

- The W M P identifies potential recycled water uses within the City of Lodi. Lodi's upcoming Recycled Water Master Plan will provide a detailed analysis of these potential demands.
- Lodi fully intends to utilize recycled water prior to 2025.

#### Table of Contents

Chapter 1: Introduction

Chapter 2: Supplier Service Area

Chapter 3: Water Supply

Chapter 4: Water Demand

Chapter 5: Demand Management Measures

Chapter 6: Water Supply Reliability

Chapter 7: Water Quality Impacts on Reliability

Chapter 8: Wastewater and Recycled Water

Chapter 9: Supply and Demand Comparison

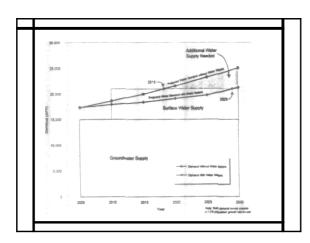
Chapter 10: Water Shortage Contingency Plan

Chapter 11: Adoption & Implementation of the UWMP

Appendices

#### Chapter 9: Supply & Demand Comparison

- The W M P compares projected supplies during normal, single dry and multiple dry years with projected demands over a 25-year horizon.
- Based on current projections, and with the use of recycledwater supplies, Lodi will have sufficient water to meet all existing and future demands.



#### Table of Contents

Chapter 1: Introduction

Chapter 2: Supplier Service Area

Chapter 3: Water Supply

Chapter 4: Water Demand

Chapter 5: Demand Management Measures

Chapter 6: Water Supply Reliability

Chapter 7: Water Quality Impacts on Reliability

Chapter 8: Wastewater and Recycled Water

Chapter 9: Supply and Demand Comparison

Chapter 10: Water Shortage Contingency Plan

Chapter 11: Adoption & Implementation of the UWMP

Appendices

#### Chapter 10: Water Shortage Contingency Plan

 Lodi's Water Shortage Contingency Plan was developed to prepare for and respond to possible future water shortages The Plan consists of five stager of action

Stage I Normal Conditions
stage II Water Alert
stage III water Warning
stage IV water Crisis
stage V Water Emerge—

 Possible catastrophic interruptions to supplier are addressed in Lodi's Emergency Response Plan

#### Table of Contents

Chapter 1: Introduction

Chapter 2: Supplier Service Area

Chapter 3: Water Supply

Chapter 4: Water Demand

Chapter 5: Demand Management Measures Chapter 6: Water Supply Reliability

Chapter 7: Water Quality Impacts on Reliability

Chapter 8: Wastewater and Recycled Water

Chapter 9: Supply and Demand Comparison
Chapter 10: Water Snortage Contingency Plan

Chapter 11: Adoption & Implementation of the UWMP

Appendice

# Chapter 11: Adoption & Implementation of the UWMP

- Lodi's UWMP will be finalized following a two week public review period. currently scheduled from February 15 to March 1, 2006.
- Upon completion, the UWMP will be furnished to San Joaquin County NortheasternSan Joaquin County Groundwater Banking Authority, and the California Dept. of Health Services.

#### **Table of Contents**

Chapter 1: Introduction

Chapter 2: Supplier Service Area

Chapter 3: Water Supply

Chapter 4: Water Demand

Chapter 5: Demand Management Measures

Chapter 6: Water Supply Reliability

Chapter 7: Water Quality Impacts on Reliability

Chapter 8: Wastewater and Recycled Water

Chapter 9: Supply and Demand Comparison
Chapter 10: Water Shortage Contingency Plan

Chapter 11: Adoption & Implementation of the UWMP

Appendices

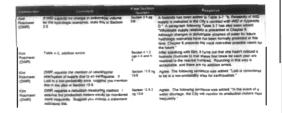
#### Appendices

# The following appendices are provided with the UWMP:

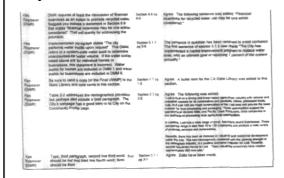
- >Adoption Resolution
- > Public Participation Information
- Conservation & Education Information
- ➤WID Contract
- > Excerpt from the Emergency Response Plan
- -SJ County Groundwater Management Plan
- >Water Balance Calculations for Lodi's Safe Yield Estimation

#### Responses to DWR's Comments

# Comments made by DWR on the *Draft* UWMP have been addressed:



#### Responses to DWR's Comments



#### esponse to Other Comments

#### Section 1.5: Public Participation

The Gity encouraged public participation in the development of the 2005 UWMP and provided opportunities for public review and comment. On February 15, 2006, the Gity placed a Notice of Intention to Adapt on its website starting that is UWMP was being updated and that a public review period would be provided to address comments and concerns from members of the community. The notice stated that the public review period would be achealable from Pebruary 15 through March 15, 2006. A copy of this Notice of Intention to Adopt is included in Appendix B. The notice, as well as the Draft 2005 UWMP, was made available for public review (Git's website. On March 15, 2006, the City conducted a public hearing to hear comments from the public regarding the UWMP. This hearing provided an opportunity for the City's customers/residents and employees in the area to learn about the water supply situation and the plans for providing a reliable, safe, high-quality water supply for the fittyes. Information regarding the public hearing and the public review period is included in Appendix B. This UWMP was finalized after the public review period and was placed on the City's website.

Section 1.6: Plan Adoption

The City prepared this 2005 UWMP Update during the fall and winter of 2005. The plan was adopted by its City Council on March 15, 2006 and was submitted to the California Department of Water Resource within 30 days of the council approval. See Appendix A for a copy of the resolution. The UWMP was also sent to the California Date Library.

#### Response to Other Comments

Section 3.2.2: Future Groundwater Supply

The continuing decline of groundwater fevels in the squifer underlying the City meany that the sustainable annual groundwater supply available to the City is something less than what is currently extracted. As a member agency of GBA, the City is participating in the development of policies and programs, including groundwater perchange and conjunctive use programs, insteaded to help eliminate the eastern San longuin County groundwater basin overdraft condition. Additionally, the City plans to reduce its overall groundwater pumping in the future. As alsy yield of approximately 15,000 AFY (Freadwall and Rollo, 2005) has been estimated for the squifer serving Lodi based on water balance calculations (see Appendix C) performed using data primarly from the Exatern San Joaquin Groundwater Management Plan (Appendix F1. This safe yield estimate reflects an acreage-based calculations). Praceptor, as the City's land area increases, the estimated safe yield of the underlying aquafire will filterly increase. The safe yield estimate will be revisited in the 2019 UWMP spates. For the purposes of this UWMP. ISOM AFY has been estimated to the community of the underlying aquafire will filterly increase. The safe yield estimate will be revisited in the 2019 UWMP spates. For the purposes of this UWMP. ISOM AFY has been the same under the same to the purpose of this UWMP. ISOM AFY has been the size with the base of the groundwater basin will occur as the amount of groundwater available during all future (post-2005) years. Although rigorous scientific analyses have not been performed, the City projects that some recharge of the groundwater basin will occur as the amount of groundwater to your development of consecred depression, significant takings in distinction or amount of groundwater for changes in distinction or amount of groundwater tow, changes in the movement of levels of contaminants, or changes in distinction or amount of groundwater down the programs of the content of groundwater than the properties of the base of contami

#### **Response to Other Comments**

#### Section 3.2.3: Future Surface Water Supply

As discussed in Section 3.1.4, in May 2003 the City entered into a 40-year agreement with WID far 6,000 AFY of surfact water from the Mokelumne River. The diversionpoint has not yet been determined. The city is considering options for implementing this source before the year 2010. Therefore, 6,000 AFY of surface water is included in the supply projections presented in Table 3-5 below. The City is also considering the possibility of obtaining additional surface water supplies from WID there supplies are not included in Table 3-5, however. PI they are not yet considered "firm" supplies.

Onos	stions?			
Ques	onons.			
2.5				
100				
27				
100				
9				

#### PROOF OF PUBLICATION

(2015.5 C.C.C.P.)

#### STATE OF CALIFORNIA

#### Connty of San Joaquin

I am a citizen of the United States and a resident of the Connty aforesaid: I am over the age of eighteen years and not a party to or interested in the above entitled matter. I am the principal clerk of the printer of the Lodi News-Sentinel, a newspaper of general circulation, printed and published daily except Sundays and holidays, in the City of Lodi, California, County of San Joaqnin and which newspaper had been adjudicated a newspaper of general circulation by the Superior Conrt, Department 3, of the County of San Joaquin, State of California, under the date of May 26th. 1953. Case Number 65990; that the notice of which the annexed is a printed copy (set in type not smaller than non-pareil) has been published in each regular and entire issue of said newspaper and not in any supplement thereto on the following dates to-wit:

•••••	 	•••••	•••••

all in the year 2006

February 18th, 25th

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Dated at Lodi, California, this 25th day of February 2006.

Signature

This space is for the County Clerk's Filing Stamp

Proof of Publication of Special Notice of Public Hearing for March 15,2006 for the Adoption of the update of Lodi's Urban Water Management Plan

#### NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that on Wednesday, March 15, 2006 at the hour of 7:W p.m., or as soon thereafter as the matter may be heard, the City Council will conduct a public hearing at the Carnegie Forum. 305 West Pine Street, Lodi, to consider the following matter:

a) Adoption of the update of Lodi's Urban Water Management Plan

The plan is available for public inspection in the Public Works Department, 221 West Pine Street, Lodi, (209) 333-6706. All interested persons are invited to present their views and comments on this matter. Written statements may be filed with the City Clerk, City Hall, 221 W. Pine Street, 2nd Floor, Lodi, 95240 at any time prior to the hearing scheduled herein, and oral statements may be made at said hearing.

If you challenge the subject matter in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice or in written correspondence delivered to the City Clerk at, or prior to, the public hearing.

By Order of the Lodi City Council:

Susan J. Blackston city Clerk

Dated: February 15, 2006

Approved as to form:

D. Stephen Schwabauer City Attorney February 18, 25, 2006 -05511438

5511438



# CITY OF LODI

**Carnegie Forum** 305 West Pine Street, Lodi NOTICE OF PUBLIC HEARING

Date: March 15,2006

7:00 p.m. Time:



#### NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that on Wednesday, March 15, 2006 at the hour of 7:00 p.m., or as soon thereafter as the matter may be heard, the City Council will conduct a public hearing at the Carnegie Forum, 305 West Pine Street, Lodi, to consider the following matter:

Adoption of the update of Lodi's Urban Water Management Plan. a)

The plan is available for public inspection in the Public Works Department, 221 West Pine Street, Lodl, (209) 333-6706. All interested persons are invited to present their views and comments on this matter. Written statements may be tiled with the City Clerk, City Hall, 221 W. Pine Street, 2nd Floor, Lodi, 95240 at any time prior to the hearing scheduled herein, and oral statements may be made at said hearing.

If you challenge the subject matter in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice or in written correspondence delivered to the City Clerk at, or prior to, the public hearing.

By Order of the Lodi City Council: Sleet

Susan J. Blackston

City Clerk

Dated: February 15,2006

Approved as to form:

D. Stephen Schwabauer City Attorney



## **DECLARATION OF POSTING**

# PUBLIC HEARING FOR March15, 2006 for the Adoption of the update of Lodi's Water Management Plan.

On Friday February 17, 2006, in the City of Lodi, San Joaquin County, California, a Notice of Public Hearing for the Adoption *of* the update *of* Lodi's Water Management Plan.

Lodi Public Library Lodi City Clerk's Office Lodi City Hall Lobby Lodi Carnegie Forum

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 17, 2006, at Lodi, California.

**ORDERED BY:** 

SUSAN J. BLACKSTON CITY CLERK

JENNIFER M. PERRIN, CMC DEPUTY CITY CLERK JACQUELINE L. TAYLOR, CMC DEPUTY CITY CLERK

DANA R. CHAPMAN ADMINISTRATIVE CLERK



# Please immediately confirm receipt of this fax by calling 333-6702

## CITY OF LODI P. O. BOX 3006 LODI. CALIFORNIA 95241-1910

## **ADVERTISING INSTRUCTIONS**

<u>SUBJECT</u> SPECIAL NOTICE OF PUBLIC HEARING FOR March 15,2006 for the Adoption of I:he update of Lodi's Urban Water Management Plan.

# **LEGAL AD**

PUBLISH DATE: February 18,2006 and February 25,2006

TEAR SHEETS WANTED: Three (3) please

SEND AFFIDAVIT AND BILL TO: SUSAN BLACKSTON, CITY CLERK

City of Lodi P.O. Box 3006 Lodi, CA 95241-1910

**DATED:** February 16,2006

ORDERED BY: SUSAN J. BLACKSTON

CITY CLERK

JENNJFER M. PERRIN, CMC

DEPUTY CITY CLERK

JACQUELINE L. TAYLOR, CMC

DEPUTY CITY CLERK

DANA R. CHAPMAN ADMINISTRATIVE CLERK

## Verify Appearance of this Legal in the Newspaper - Copy to File

	Faxed to the	Sentinel at 369-1084 at 369-1084	(time) on ZIV	(date)(	pages)	
LVS	>,\h <u>a&lt;-</u>	Phoned to contirm receipt of all pages	sat 3431 (time)	_JLTDRC_	JMP (initial	ls)

CITY COUNCIL

SUSAN HITCHCOCK, Mayor BOB JOHNSON, Mayor Pro Tempore JOHNBECKMAN LARRY D. HANSEN JOANNE MOUNCE

# CITY OF LODI



#### PUBLIC WORKS DEPARTMENT

CITY HALL, 221 WEST PINE STREET / P.O. BOX 3006 LOOI. CALIFORNIA 95241-1910 TELEPHONE (209) 333-6706 / FAX (209) 333-6710 EMAIL pwdept@lodi.gov http://www.lodi.gov

February 16,2006

BLAIR KING, City Manager

SUSAN J. BLACKSTON. City Clerk

O. STEPHEN SCHWABAUER. City Attorney

RICHARD C. PRIMA, JR.. Public Works Director

San Joaquin County Attn: Dr. C. Mel Lytle 1810 E. Hazelton Avenue Stockton, CA 95201

SUBJECT: 2005 Urban Water Management Plan (REVISED)

Enclosed is the City of Lodi's draft 2005 Urban Water Management Plan (UWMP). The State of California Water Code Section 10644 requires that the City provide a copy of this UWMP to all cities and counties within which the City provides water. If you have any comments on this draft UWMP. please send them to my attention.

This revised letter extends the public review period to March 15<sup>th</sup>. Therefore, the revised public review period is from February 15" to March 15<sup>th</sup>. The Plan will be brought to the City of Lodi City Council for adoption on March 15, 2006.

If you have any questions, please contact me at (209) 333-8800 extension 2593.

Sincerely,

Charlie Swimley Senior Civil Engineer

CES/pmf

Enclosure

cc: Richard Prima, Public Works Director
Northeastern San Joaqum County Groundwater Banking Authority
Woodbridge Inflation District
State of California Department of Water Resources Central District